

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for rendering a character in a font, the system comprising:

a first memory having stored therein a data structure, the data structure including a plurality of font arrays; and

a graphics controller coupled to the first memory, the graphics controller accessing a font array included in the data structure, the graphics controller comprising a first register for holding glyph information for a character in the font wherein the graphics controller reads the glyph information from the first memory into the first register, a second register that specifies an address for the font array for the font wherein the graphics controller locates the font array using the address, and a third register that contains an index to the character in the font array wherein the graphics controller locates the glyph information for the character in the font array using the index, wherein width and height information for the character is located in the font array using the address and the index in combination, wherein the size of the character is determined according to which of the font arrays is selected, and wherein for the graphics controller to render the character, a central processing unit transfers to the graphics controller only the address for the font array, the index for the character in the font array, an x-value indicating a horizontal position for the character and a y-value indicating a vertical position for the character.

2. (Previously Presented) The system of claim 1 wherein the first memory comprises a frame buffer.

3. (Previously Presented) The system of claim 1 wherein the first memory comprises a system memory.

4. (Previously Presented) The system of claim 1 in which the font array includes a plurality of characters.

5. (Original) The system of claim 4 in which each of the characters comprises one bit per pixel.

6. (Previously Presented) The system of claim 4 in which each of the characters comprises a plurality of bits per pixel.

7-11. (Canceled).

12. (Previously Presented) The system of claim 4 in which each of the characters includes size height information.

13. (Previously Presented) The system of claim 4 in which each of the characters includes size width information.

14-15. (Canceled).

16. (Previously Presented) The system of claim 1 in which the graphics controller further comprises a font pitch register.

17. (Previously Presented) The system of claim 1 in which the graphics controller further comprises an index register.

18. (Previously Presented) The system of claim 1 in which the graphics controller further comprises a horizontal information register.

19. (Previously Presented) The system of claim 1 in which the graphics controller further comprises a vertical information register.

20. (Previously Presented) The system of claim 1 in which the graphics controller further comprises a linear information register.

21-23. (Canceled).

24. (Previously Presented) The system of claim 1 in which the graphics controller further comprises a size width register that contains the width of an output monochrome rectangle.

25. (Previously Presented) The system of claim 1 in which the graphics controller further comprises a size height register that contains the height of an output monochrome rectangle.

26. (Currently Amended) A method for rendering a character in a font, the method comprising:

accessing, with a graphics controller, a data structure located in a first memory, the data structure including a plurality of font arrays, wherein the font arrays comprise a first font array for characters and a second font array for the characters, wherein the size of the font characters in the first font array is different from the size of the font characters in the second font array;

the graphics controller selecting one of the first and second font arrays using an address specified in a first register of the a graphics controller such that the size of a character in the font is determined according to the address specified;

the graphics controller reading information for the character in the font from the selected font array, wherein the character is located by the graphics controller in the selected font array using an index contained in a second register of the graphics controller, and wherein the information includes width and height information for the character; and

the graphics controller placing the information read from the font array in a third register resident on the graphics controller, wherein the third register also holds glyph information for the character, wherein for the graphics controller to render the character, a central processing unit is required to transfer to the graphics controller only the address for selecting one of the first and second font arrays, the index for locating the character in the selected font array, an x-value indicating a horizontal position for the character and a y-value indicating a vertical position for the character.

27. (Previously Presented) The method of claim 26 wherein the first memory comprises a frame buffer.

28. (Previously Presented) The method of claim 26 wherein the first memory comprises a system memory.

29-32. (Canceled).

33. (Previously Presented) The method of claim 26 in which each of the plurality of font arrays includes a plurality of characters.

34. (Original) The method of claim 33 wherein characters within different font arrays can be different sizes.

35. (Original) The method of claim 34 in which each of the characters comprises one bit per pixel.

36. (Original) The method of claim 34 in which each of the characters comprises a plurality of bits per pixel.

37-38. (Canceled).

39. (Previously Presented) The method of claim 26 in which the graphics controller further comprises a font pitch register.

40. (Canceled).

41. (Previously Presented) The method of claim 26 in which the graphics controller further comprises a horizontal information register.

42. (Previously Presented) The method of claim 26 in which the graphics controller further comprises a vertical information register.

43. (Previously Presented) The method of claim 26 in which the graphics controller further comprises a linear information register.

44-45. (Canceled).

46. (Previously Presented) The method of claim 26 in which the graphics controller further comprises a size width register that contains the width of an output monochrome rectangle.

47. (Previously Presented) The method of claim 26 in which the graphics controller further comprises a size height register that contains the height of an output monochrome rectangle.

48. (Currently Amended) A system for rendering characters, the system comprising:

a central processing unit;

a memory coupled to the central processing unit and having stored therein a data structure, the data structure comprising glyph information for each of a plurality of characters, the data structure also comprising size width information and size height information for each of the characters; and

a graphics controller coupled to said memory;

wherein the size width information and the size height information for a character to be rendered are read by the graphics controller from the data structure to a register that resides on the graphics controller, wherein the register also contains glyph information for the character read by the graphics controller from the memory, the graphics controller using the glyph information to render the character, wherein for the graphics controller to render the character, the central processing unit is required to transfer to the said graphics controller only an address for the data structure, an index value for locating the character in the data structure, an x-value indicating a horizontal

position for the character and a y-value indicating a vertical position for the character,
wherein the graphics controller locates the data structure using the address and locates
the character using the index value.

49. (Previously Presented) The system of Claim 48 wherein the said memory comprises a portion of the frame buffer.

50. (Previously Presented) The system of Claim 48 wherein the memory comprises a plurality of data structures, each of the data structures corresponding to a particular character font.

51-54. (Canceled).